Ham-Digital Digest            Sun, 31 Jul 94        Volume 94 : Issue   256

Today's Topics:
                        9600 baud & MICOR HELP?
             ??using MAC with KPC-3 and Hostmaster program??
                           cheap packet?
                     GTOR--A big improvement?
                          MFJ 1278 Ops
                Mic connection KAM--> HTX-202 (3 msgs)
                     Need KISS Protocol FTP Site

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party.  Your mileage may vary.  So there.
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Date: 29 Jul 1994 20:18:05 -0400
From: newstf01.cr1.aol.com!search01.news.aol.com!not-for-mail@uunet.uu.net
Subject: 9600 baud & MICOR HELP?
To: ham-digital@ucsd.edu

In article <775205816snz@gw6hva.demon.co.uk>, martin@gw6hva.demon.co.uk
(Martin Vernon) writes:

Roger Martin, that is what the manual I have says also....When we talked
to the people at MFJ, they said that was a misprint and should have been
80 mVolts...
I would surely like toget this problem resolved... the 440node has to be
running by fall....The SHELL node site is 9800 feet and really hard to get
to for service in the winter.....I appreciate your comments and would
really appreciate any help...
73 Neal KE7VS

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Date: Fri, 29 Jul 1994 19:55:56 -0500
From: ihnp4.ucsd.edu!news.acns.nwu.edu!math.ohio-state.edu!howland.reston.ans.net!
gatech!udel!news.sprintlink.net!bga.com!slip234.bga.com!user@network.ucsd.edu
Subject: ??using MAC with KPC-3 and Hostmaster program??
To: ham-digital@ucsd.edu

In article <Ctpr9G.2wo@ucdavis.edu>, szhall@chip.ucdavis.edu () wrote:

>   I have been using my KPC-3 with a PC and now I would like some feeling
> using a MAC for packet..I have a MAC and a KPC-3 TNC plus a HOSTMASTER
> program...Does anyone have any feeling using this set up?  Does it work
> fast or slow and would better than the PC.  Almost forgot..The MAC I
> would be using would be an old MAC APPLE no hard disk or a MAC
> CLASSIC...Thanks for taking time to read this and hope you can
> comment..Jeff

I can't speak to the relative speed of the PC vs the Mac with
Hostmaster/KPC-3; however, I have been using a KPC3 with a variety of Macs
(IIsi, PB145, Plus) and a very impressed with the package.  Hostmaster is
self documented and runs very smoothly even totally mobile on a PB145.

HostMaster is requires 512K of disk space so putting it on 800K disk with
Sys6.0.7 would be the best alternative in your situation (unless you have
persuaded the Plus or the Classic to accept a 1.4M SuperDrive then you
could run Sys7.0.1).

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Date: Fri, 29 Jul 1994 19:51:49 GMT
From: ihnp4.ucsd.edu!news.cerf.net!mvb.saic.com!eskimo!rdonnell@network.ucsd.edu
Subject: cheap packet?
To: ham-digital@ucsd.edu

Ross Frederick Blakeney (aa568@cfn.cs.dal.ca) wrote:


: --
: hello all,  just wondering if there is anyway to use my modem as a TNC
: if I have a program for the baymod or similar????
: TIA
: 73 de VE1RFB
: -Ross-


Sorry, have to say, no, it's not going to work.  The modulation standards

used for phone modems and packet radio are different.  The closest you could
come (and it >has< been used before) is to find an obsolete Bell 202 modem
and modify it for radio interface, TX/RX control, etc.

73, Bob  KD7NM

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Bob Donnell, kd7nm     bob@ethanac.kd7nm.ampr.org    rdonnell@eskimo.com
Western Washington Amateur IP Address Coordinator    (206) 775-3651
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Date: Fri, 29 Jul 1994 20:40:47 GMT
From: hplextra!news.dtc.hp.com!srgenprp!alanb@hplabs.hpl.hp.com
Subject: GTOR--A big improvement?
To: ham-digital@ucsd.edu

Bill Coleman (bcoleman@hayes.com) wrote:

: > Another tack is a multi-tone system like Piccolo.

: Mutiple tones is the way to go for HF. You have to keep the symbol rate low
: and avoid phase modulation to avoid multipath phase distortion. You can't
: get too many states of amplitude modulation because the signal references
: change too much. It is nearly impossible to equalise a lot of the
: imperfections of the HF link since they change so rapidly. Your only choice
: is to use more tones.

Even on VHF, multipath propagation can cause similar problems.  DMCA is
one mode that uses 4 independent carriers, each running 16QAM (4 bits per
symbol) to get a total of 16 bits per symbol.  That way you can keep the
symbol rate down (to reduce multipath interference) while still keeping
a high bit rate.

The Europeans are big into OFDM (Orthogonal Frequency Division Multiplex)
for things like digital TV and DAB (Digital Audio Broadcast) for the same
reasons.  OFDM uses hundreds of carriers spaced orthogonally (1 bit rate
apart) to obtain very high bit rates with very low symbol rates.

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Date: 29 Jul 1994 22:35:36 GMT
From: ihnp4.ucsd.edu!munnari.oz.au!comp.vuw.ac.nz!waikato!auckland.ac.nz!
status.gen.nz!iconz.co.nz!kevinb@network.ucsd.edu

Subject: MFJ 1278 Ops
To: ham-digital@ucsd.edu

I have a Mfj 1278 and havent really had a great success with it on some
of the modes ie fax/sstv/rtty has anybody had similar probs or can offer
me some advice as to how to get a better performance out of the 1278,I
would also be pleased to hear on the performance of the 1278 on non
Amateur bands such as news rtty services and the like.
E-mail replies welcome many thanks.
                                  kevinb@iconz.co.nz

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Date: Fri, 29 Jul 94 18:46:41 -0500
From: news.delphi.com!usenet@uunet.uu.net
Subject: Mic connection KAM--> HTX-202
To: ham-digital@ucsd.edu

I've spent the last 2 days trying to get my KAM and HTX-202 to communicate with
each other.  I am receiving packet data just fine
but cannot seem to make a connection.  The HTX-202 is transmitting, but I
suspect the mic connection is not wired properly and it therefore just
transmitting useless noise.  I am not very technically oriented, so I would
appreciate any advice as to the correct wiring for the mic.  Any other
suggestions would be greatly appreciated.  Tnx.

Dennis, N1RDN

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Date: Sat, 30 Jul 1994 13:18:22 GMT
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!swrinde!emory!kd4nc!ke4zv!
gary@network.ucsd.edu
Subject: Mic connection KAM--> HTX-202
To: ham-digital@ucsd.edu

In article <py-QrrJ.moleman@delphi.com> moleman@delphi.com writes:
>I've spent the last 2 days trying to get my KAM and HTX-202 to communicate with
>each other.  I am receiving packet data just fine
>but cannot seem to make a connection.  The HTX-202 is transmitting, but I
>suspect the mic connection is not wired properly and it therefore just
>transmitting useless noise.  I am not very technically oriented, so I would
>appreciate any advice as to the correct wiring for the mic.  Any other
>suggestions would be greatly appreciated.  Tnx.

The following circuits work for RS, Icom, and Yaesu HTs.

This one's small, it can be build into the plug.

```
                 C
TNC AF OUT------||----x--------------> HT mic tip
                 R     |
TNC PTT-----/\/\/\/\--x

TNC AF IN----------------------------> HT ear tip

TNC GND---------------------------< HT ear ring
```

C may be included in your TNC output circuitry, but can be a 1 mfd
capactitor otherwise. R is the "leaky PTT" resistor. A value between
2 kohm and 10 kohm will trigger the HT. Icoms work with a higher value
resistor, Yaesus require a lower value resistor. RS will need a bit
of experimentation, but a 2k to 4k resistor should work fine for most
of them.

This circuit is better because it offers faster and more positive
PTT.

```
                     T
TNC PTT----------))))))))))---------> HT mic tip
                  ========
TNC AF OUT-------)))))))))--x---------< HT ear ring
                            |
TNC GND------------------x

TNC AF IN-------------------------> HT ear tip
```

T is any small audio interstage transformer. A 600:600 ohm unit
is nominal. You can salvage these out of old transistor radios,
or get one in a Radio Shack grab bag. They're small enough to
heatshrink into a cable or piggyback on a connector.

Gary
--
Gary Coffman KE4ZV          |    You make it,     | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems |    we break it.     | uunet!rsiatl!ke4zv!gary
534 Shannon Way             |    Guaranteed!      | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244     |                     |

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moleman@delphi.com wrote:
: I've spent the last 2 days trying to get my KAM and HTX-202 to communicate with
: each other.  I am receiving packet data just fine
: but cannot seem to make a connection.  The HTX-202 is transmitting, but I
: suspect the mic connection is not wired properly and it therefore just
: transmitting useless noise.

You may be wired correctly, but just need to increase your audio output
in the TNC.. Check your manual for the part concerning "connecting
the TNC to a handheld radio" and you will find a "jumper" to move
for this type of operation.  Once you have done that, you can adjust
your audio output level - the best down and dirty way is to monitor
your signal with another radio (scanner for example) and listen
how it sounds compared to others on the frequency.  Adjust the appropriate
place to make the two sound as close together as possible..


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- - - - - - - - - - - - - -  mikec@comtch.iea.com  - - - - - - - - - - - - - - - -

Michael B. Candy                          Amateur Radio Call: KI7FX
P.O. Box 1953                             KI7FX@KA7FVV.#EWA.WA.USA.NA
Airway Hts, WA. 99001-1953                American Digital Radio Society



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Date: Fri, 29 Jul 1994 13:39:07 GMT
From: lll-winken.llnl.gov!overload.lbl.gov!agate!howland.reston.ans.net!gatech!
news-feed-1.peachnet.edu!ukma!lexmark!lexmark.com!MITCH@ames.arpa
Subject: Need KISS Protocol FTP Site
To: ham-digital@ucsd.edu

I'm looking for a description of the KISS protocol used between the
TNC and computer.  Does anyone know of an FTP site that might contain
it.  I've looked around and not found it.

Thanks, Gary  (WB9TPG)

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Date: Fri, 29 Jul 1994 14:39:02 GMT
From: lll-winken.llnl.gov!overload.lbl.gov!agate!howland.reston.ans.net!
europa.eng.gtefsd.com!gatech!darwin.sura.net!rsg1.er.usgs.gov!stc06.CTD.ORNL.GOV!
xdepc.eng.ornl.gov!wyn@ames.arpa
To: ham-digital@ucsd.edu

References <1994Jul19.125835.17582@ke4zv.atl.ga.us>, <wyn.56.2E2D1CE3@ornl.gov>,
<1994Jul2
Subject : Re: One-way automated digital=bad

In article <Ctno15.98J@bbc.co.uk> boyer@rd.eng.bbc.co.uk (John Boyer) writes:

>: Standard channelization is the norm in all services except the amateur
>: service, and is even accepted there for most VHF/UHF activity. There's
>: a very good reason why everyone else has gone to standard channels, and
>: that reason is lessened mutual interference. Amateurs are being backward
>: in refusing to acknowledge the advantages of channelization as a tool for
>: interference control.


>Well said Gary!!!

>John B


>john.boyer@rd.eng.bbc.co.uk

We tried channelization on a former amateur band several years ago.  It worked
for a while and became very popular until the sunspot cycle shifted from low
to high.  Then there was chaos and bedlam.  The poor blokes could not talk
across town in Boston for being jammed with hetrodynes from LA.  After
that the system fell into abuse and disuse.  Equipment vendors went out of
business, etc.  -- Lessons learned!??  Don't do channelization on HF bands.


73,
C. C. (Clay) Wynn N4AOX
wyn@ornl.gov

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= Cooperation requires participation.  Competition teaches cooperation. =
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       ..._  .. ..._  ._   _ . ._.. . __. ._. ._ .__. .... _.__

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Date: (null)
From: (null)
73

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Henry Middlebrook         Internet: henrym@bga.com
Austin, TX                 AMPRnet: n5shl@n5shl.ampr.org

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End of Ham-Digital Digest V94 #256
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